

IN THE CLAIMS:

Please cancel claims 1-58 without prejudice or disclaimer.

Please amend the claims as follows:

1.-58. (Cancelled)

59. (New) A contact device for collecting eye fluid from the eye and detecting at least one analyte, said contact device comprising

a housing for placement on the surface of the eye,

an analyte detecting element of the housing for detecting the at least one analyte in the eye fluid from the eye, and

said housing being less than 5.0 mm in thickness.

60. (New) The contact device of claim 59, wherein said analyte detecting element is at least one of a molecular imprint, enzyme, antibody, antigen, chromogen, nucleic acid, a fluorescent element and an analyte detecting sensor.

61. (New) The contact device as claimed in claim 59, wherein the housing further includes surface charges.

62. (New) The contact device as claimed in claim 61, wherein the surface charges include a negatively charged perfluorinated ionomer.

63. (New) The contact device as claimed in claim 61, wherein the housing includes at least one of a surface charge for repulsing analytes and a surface charge for increasing attraction to analytes of interest.

64. (New) The contact device as claimed in claim 61, wherein the surface charges include at least one of a positive surface charge and a negative surface charge.

65. (New) The contact device as claimed in claim 59, wherein the housing includes at least one coating for preferential selection of said at least one analyte.

66. (New) The contact device as claimed in claim 59, wherein said housing includes a site for said at least one analyte.

67. (New) The contact device as claimed in claim 66, wherein said site is coated with antibodies for generating a detectable signal after interaction with said at least one analyte.

68. (New) The contact device as claimed in claim 59, wherein said analyte detecting elements detects an analyte selected from the group consisting of antibodies, hormone, drugs, enzymes, nucleic acids, glucose, cholesterol, proteins, toxic compounds, amino acids, inflammatory mediators, hemoglobin, cancer markers, genetic markers, heart markers, electrolytes, gases, antigens, alcohol, urea, creatinine and infectious agents.

69. (New) The contact device as claimed in claim 59, wherein the housing is at least one of a soft contact lens, a hard contact lens, a hydrogel contact lens and a combination thereof.

70. (New) The contact device as claimed in claim 59, wherein the housing has areas for receiving the eye fluid, said eye fluid being stored for at least one of immediate processing and later processing of said at least one analyte.

71. (New) The contact device as claimed in claim 69, further comprising a device for analyzing said contact lens after said contact lens is removed from said eye.

72. (New) The contact device as claimed in claim 59, wherein said housing generates a detectable signal according to one of presence and amount of said at least one analyte in said eye fluid.

73. (New) The contact device as claimed in claim 59, wherein the housing detects at least one hormone in the eye fluid.

74. (New) The contact device as claimed in claim 73, wherein said housing detects a health status of a mammal.

75. (New) The contact device as claimed in claim 59, wherein the housing detects ovulation.

76. (New) The contact device as claimed in claim 59, wherein the housing detects disease of pregnancy.

77. (New) The contact device as claimed in claim 59, wherein the housing detects the health status of a female mammal.

78. (New) The contact device as claimed in claim 59, wherein the analyte detecting element generates a detectable signal.

79. (New) The contact device as claimed in claim 78, wherein the detectable signal includes optically detectable signals.

80. (New) The contact device as claimed in claim 79, wherein the optically detectable signal includes at least one of fluorescent light, change in color and change of an amount of radiation of said analyte detecting element.

81. (New) The contact device as claimed in claim 59, wherein the housing includes a glucose detecting element.

82. (New) The contact device as claimed in claim 81, wherein said glucose detecting element detects a presence of diabetes in a non-diabetic person.

83. (New) The contact device as claimed in claim 59, wherein the analyte detecting element comprises a testing agent for interacting with said at least one analyte to form a detectable signal based on an amount of an analyte present in the eye fluid.

84. (New) The contact device as claimed in claim 83, wherein the detectable signal is an optically detectable signal.

85. (New) The contact device as claimed in claim 83, wherein the testing agent is a chromogen which changes color based on one of a presence and an amount of analyte present in the eye fluid.

86. (New) The contact device as claimed in claim 83, wherein the analyte is glucose.

87. (New) The contact device as claimed in claim 59, wherein the housing detects at least one of diseases of the body and an amount of drugs present in the eye fluid.

88. (New) A method for detecting at least one analyte in eye fluid, said method comprising the steps of

contacting said eye fluid with a contact lens having an analyte detecting element,

collecting said eye fluid in said contact lens, and

determining one of an amount and a presence of said at least one analyte in said eye fluid.

89. (New) The method of claim 88, further including the step of wearing the contact lens on said eye.

90. (New) The method of claim 88, further including the step of removing the contact lens from said eye for processing of said at least one analyte.

91. (New) The method of claim 90, further including the step of wearing the contact lens for receiving said eye fluid from said eye prior to the step of removing the contact lens from said eye for evaluation of said at least one analyte.

92. (New) The method of claim 88, wherein the analyte detecting element is at least one of a molecular imprint, enzyme, antibody, antigen, chromogen, nucleic acid, a fluorescent element and an analyte detecting sensor.

93. (New) The method of claim 88, wherein the determining step is based on at least one molecular imprint for the analyte.

94. (New) The method of claim 88, further including the step of producing a detectable signal based on one of a presence, an absence and an amount of said at least one analyte.

95. (New) The method of claim 88, wherein said at least one analyte is selected from the group consisting of antibodies, hormone, drugs, enzymes, nucleic acids, glucose, cholesterol, proteins, toxic compounds, amino acids, inflammatory mediators, hemoglobin, cancer markers, genetic markers, heart markers, electrolytes, gases, antigens, alcohol, urea, creatinine and infectious agents.

96. (New) The method of claim 88, wherein the contact lens includes a plurality of storage areas.

97. (New) The method of claim 88, wherein the contact lens detects at least one hormone in the eye fluid.

98. (New) The method of claim 97, wherein said at least one hormone detected in the eye fluid determines a health status of a mammal.

99. (New) The method of claim 88, wherein the contact lens detects ovulation.

100. (New) The method of claim 88, wherein the contact lens detects disease of pregnancy.

101. (New) The method of claim 88, wherein the contact lens detects a health status of a female mammal.

102. (New) The method of claim 88, wherein the contact lens detects glucose.

103. (New) The method of claim 88, further including a step of detecting glucose by the contact lens during fasting in a non-diabetic subject for screening diabetes in said non-diabetic subject.

104. (New) The method of claim 88, wherein the analyte detecting element includes a testing agent for interacting with said at least one analyte to form a detectable signal based on an amount of analyte present in the eye fluid.

105. (New) The method of claim 88, wherein the detectable signal is an optically detectable signal.

106. (New) The method of claim 104, wherein the testing agent is a chromogen which changes color based on one of a presence and an amount of analyte present in the eye fluid.

107. (New) The method of claim 106, wherein the analyte is glucose.

108. (New) The method of claim 88, wherein said contact lens is one of a soft contact lens, a hydrogel soft contact lens, a hard contact lens and a combination thereof.

109. (New) The method of claim 88, wherein the contact lens includes at least one of a surface charge for repulsing analytes and a surface charge for increasing attraction to the analyte of interest.

110. (New) The method of claim 109, wherein the surface charge includes at least one of a positive surface charge and a negative surface charge.

111. (New) The method of claim 88, further including a device for analyzing said contact lens after said contact lens is removed from said eye.

112. (New) The method of claim 88, wherein the contact lens includes at least one coating for selection of said at least one analyte.

113. (New) The method of claim 88, wherein said contact lens includes a site for an analyte of interest.

114. (New) The method of claim 113, wherein said site is coated with antibodies for generating a detectable signal after interaction with said at least one analyte.

115. (New) The method of claim 88, wherein the contact lens including a housing for placement on the surface of an eye, said housing being less than 5.0 mm in thickness.

116. (New) A tear-collecting contact lens for collecting at least one analyte in eye fluid, said tear-collecting contact lens comprising

a housing for placement on the surface of the eye, said housing having at least one storage area for collecting said at least one analyte in the eye fluid, and

said housing being less than 5.0 mm in thickness.

117. (New) The tear-collecting contact lens as claimed in claim 116, wherein the at least one storage area is an ionization storage area.

118. (New) The tear-collecting contact lens as claimed in 117, wherein the housing has separate storage areas for allowing partial or complete removal of the housing from the eye for evaluation.

119. (New) The tear-collecting contact lens as claimed in claim 116, wherein said at least one analyte collected by said housing is selected from the group consisting of antibodies, hormone, drugs, enzymes, nucleic acids, glucose, cholesterol, proteins, toxic compounds, amino acids, inflammatory mediators, hemoglobin, cancer markers, genetic markers, heart markers, electrolytes, gases, antigens, alcohol, urea, creatinine and infectious agents.

120. (New) The tear-collecting contact lens as claimed in claim 116, further comprising an analyte detecting element.

121. (New) The tear-collecting contact lens as claimed in claim 120, wherein said analyte detecting element is at least one of a molecular imprint, enzyme, antibody, antigen, chromogen, nucleic acid, a fluorescent element and an analyte detecting sensor.

122. (New) The tear-collecting contact lens as claimed in claim 116, wherein the housing further includes surface charges.

123. (New) The tear-collecting contact lens as claimed in claim 116, wherein the housing is at least one of a soft contact lens, a hard contact lens, a hydrogel contact lens and a combination thereof.

124. (New) A method for collecting at least one analyte in eye fluid, said method comprising the steps of

contacting said eye fluid with a contact lens,

collecting said eye fluid in said contact lens, and

determining one of an amount and a presence of said at least one analyte in said eye fluid in said contact lens.

125. (New) The method of claim 124, further comprising a step of wearing the contact lens on said eye.

126. (New) The method of claim 124, further comprising a step of removing the contact lens from said eye for evaluation of said at least one analyte.

127. (New) The method of claim 124, wherein the contact lens includes an analyte detecting element.

128. (New) The method of claim 127, wherein the analyte detecting element is at least one of a molecular imprint, enzyme, antibody, antigen, chromogen, nucleic acid, a fluorescent element and an analyte detecting sensor.

129. (New) The method of claim 124, wherein the contact lens is at least one of a soft contact lens, a hard contact lens, a hydrogel contact lens and a combination thereof.

130. (New) The method of claim 124, wherein said at least one analyte is selected from the group consisting of antibodies, hormone, drugs, enzymes, nucleic acids, glucose, cholesterol, proteins, toxic compounds, amino acids, inflammatory

mediators, hemoglobin, cancer markers, genetic markers, heart markers, electrolytes, gases, antigens and infectious agents.

131. (New) The method of claim 88, wherein said eye fluid is selected from a group consisting of tears, aqueous humor and tissue fluid.